Overview

Models

NVIDIA Quadro K4000M 4GB Graphics C3G86AA

Introduction

The NVIDIA Quadro® K4000M graphics board (N14E-Q3) is a graphics processing unit (GPU) module designed using the MXM™ version 3.0 Type B specification. This graphics board is targeted for high end professional 3D workstation graphics applications.

Performance and Features

This graphics offering replaces the Quadro 4000M graphics for the HP Z1.

The Quadro K4000M offers a boost in CUDA core count to 960 and a fast GDDR5 4GB memory subsystem. Along with GPU architectural improvements, the K4000M provides a great boost in performance over its predecessor.

Compatibility

Supported on HP Z1 workstation.

Service and Support

The NVIDIA Quadro K4000M has a one-year limited warranty or the remainder of the warranty of the HP product in which it is installed. Technical support is available seven days a week, 24 hours a day by phone, as well as online support forums. Parts and labor are available on-site within the next business day. Telephone support is available for parts diagnosis and installation. Certain restrictions and exclusions apply.

Technical Specifications

Form Factor	MXM v3.0 Type B (82mm x 105mm)
Graphics Controller	N14E-Q3, 600MHz core clock
Bus Type	MXM v3.0
Memory	4GB GDDR5, 256-bit wide interface, 89GB/s
Connectors	One MXM v3.0 connector (285-pin)
Maximum Resolution	In Z1 application: - Internal Display: 2560x1440 - External Display via DP connector: 2560x1600
RAMDAC	Not Applicable
Image Quality Features	Capable of 10-bit per channel (3 channels) internal display processing, including hardware support for 10-bit per channel scan-out 64-bit texture filtering and blending Advanced vertex and pixel shaders, antialiasing, 16x anisotropic filtering MPEG-2 HD, MPEG-4 HD, DVIX, and WMV HD video playback (1920x1080p) H.264 hardware decode acceleration AES-128 CTR/CBC/ECB decryption modes supported Advanced video algorithms NVIDIA Digital Vibrance Control 3.0
Shading Architecture	Shader Model 5.0 support 960 processor cores
Supported Graphics APIs	Full IEEE 764-2008 32-bit or 64-bit precision DirectX 11.0, Shader Model 5.0, OpenGL 4.1 Compute API support for NVIDIA CUDA C, CUDA C++, DirectCompute 5.0, Java, Python and Fortran
Available Graphics Drivers	Windows 8 32-bit and 64-bit Windows 7 32-bit and 64-bit SUSE Linux Enterprise Desktop 11 HP Linux Installer Kit See www.hp.com/go/support for HP supported NVIDIA graphics drivers
Power Consumption	100W

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